

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Official Action dated May 18, 2007 and the interview conducted on June 19, 2007.

Applicants thank the Examiner and her supervisor for taking the time to conduct the interview. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

Claims 1, 3, 6 and 9-10 are currently pending in the above-identified application. Claims 1, 6 and 9-10 are being amended, as set forth in the above marked-up presentation of the claim amendments, in order to more particularly define and distinctly claim applicant's invention.

All the amendments to the claims are supported by the specification. Applicant hereby submits that no new matter is being introduced into the application through the submission of this response.

Prior Art Rejection

Claims 1, 3, 6 and 9-10 were rejected under 35 U.S.C. §102(b) as being anticipated by a newly cited reference US Pat. No. 6,172,986 to Watanuki et al. (hereinafter "Watanuki"). This rejection has been carefully considered, but is most respectfully traversed, as more fully discussed below.

The method of the present invention (for example, the embodiment depicted in Figs. 1-2 & 24; pp. 16-21) of translating protocols at a translator 11 connected to a first network 1 transferring data in a first protocol IPv6, a second network 3 transferring data in a second protocol IPv6, and a translation server 21, wherein an additional translator 12 is connected to the first network 1, second network 3, and the translation server 21 in recited in claim 1. The method comprising the steps of: detecting an address query ("e.g. DNS Query (QNAME:R)" in Fig. 24) for an address of a second terminal 42 accommodated in said second network 3, from a first mobile terminal 41 accommodated in said first network 1, before sending a packet from said first mobile terminal to said second terminal (Fig. 24); in response to the address query, generating a first address s6 in said first protocol IPv6 corresponding to a second address r4 in said second protocol IPv4 which is provided to said second terminal 42

in the second network 3 (e.g., embedded in DNS response (ADDR: s6) in Fig. 24); retaining a correspondence between said first address s6 and said second address r4 as translation information (s6 <-> r4) for a protocol translation between said first protocol IPv6 and said second protocol IPv4; and registering the correspondence between said first address s6 and said second address r4 in said translation server 21 by said translator 11.

Upon receiving at said additional translator 12 the packet (t6|s6) having said first address s6 as a destination address from said first mobile terminal 41 after a movement of said first mobile terminal 41 within said first network 1 (from location p to location q) while said second terminal 42 remaining in said second network 3 (Fig. 2), said additional translator 12 being provided corresponding to a location q of the first mobile terminal 41 after the first mobile terminal 41 has moved, the method further comprises the steps of: inquiring, at said additional translator 12, said translation server 21 of said translation information (s6 <-> r4) of said second terminal 42; receiving, at said additional translator 12, the correspondence between said first address s6 and said second address r4 registered by said translator 11 from said translation server 21; rewriting, at said additional translator 12, said destination address s6 of the packet to said second address r4 according to the correspondence; and transmitting, at said additional translator 12, said rewritten packet (14|r4) to said second terminal 42.

In contrast, Watanuki merely continuously transmits a packet of a 1st Internet Protocol network from a visiting mobile node traveling from 1st Internet Protocol into a foreign network which only supports a 2nd Internet Protocol but not the 1st Internet Protocol. For example, Watanuki adds a IPv4 header to the packet used for the IPv6 and then transmits it from the foreign IPv4 network (col. 4, lines 12-16). As such, Watanuki maintains the IPv6 network connection established before the mobile node moving into the IPv4 network (col. 3, lines 20-25). Watanuki's IPv6 packet transmission request (col. 15, line 55) destined to a IPv4 network (col. 15, line 63) is a regular packet sending request which merely involves a prior art source IPv6 address of the source mobile node and a prior art destination IPv4 address of a destination mobile node, and a IPv4 header 1401 (col. 15, line 65 to col. 16, line 6). On the other hand, the present invention concerns the packets transmission between a 1st user terminal moving within 1st Internet Protocol and a 2nd user terminal remaining in a 2nd Internet Protocol network.

Watanuki's source mobile node 106 executes the IPv6 packet transmission processing 90 (col. 15, lines 51-54) by receiving the transmission request from a network application, setting the IPv4 address of the destination mobile agent 107 into the IPv6 packet 1501,

adding the IPv4 header 1401 into the packet, and then sending the IPv4 encapsulated IPv6 packet 1500 to the destination mobile agent 107 (col. 16, lines 10-21).

First of all, Watanuki's transmission request of the IPv6 packet 1501 is sent from a "network application" *to* the source mobile node 106, rather than sent *from* a first/source mobile terminal 41 (to a DNS server 23 -> translator 12 -> a DNS server 24) as the address query of the present invention.

Secondly, Watanuki's IPv6 mobile agent 107, which receives the packet 1500, is not a second/destination terminal/node in the second network of the present invention. Watanuki's IPv6 mobile agent 107 assists the movement of the node which executes communication by utilizing the IPv4 and IPv6 and also executes communication by utilizing the IPv6 between the networks. The IPv6 mobile agent 107 functions also as a router and connects the LAN-a 100 and the WAN 102 (col. 8, lines 59-64). As such, Watanuki merely sets the IPv4 address of the destination mobile agent 107 into the IPv6 packet 1501, but not any IPv4 address of the second/destination terminal/node as the present invention. Watanuki neither request any IPv4 address of the second/destination terminal/node as the present invention, nor send out an "address query for an address of a second/destination terminal 42 accommodated in said second network 3, from a first mobile terminal 41 accommodated in said first network 1, before sending a packet from said first mobile terminal 41 to said second terminal" as recited in claim 1.

As results, Watanuki does not "retain a correspondence between said first address s6 and said second address r4 (of the a second/destination terminal 42 accommodated in said second network 3) as *translation information* (s6 <-> r4) for a protocol translation between said first protocol IPv6 and said second protocol IPv4" or "inquire, at said additional translator 12, said translation server 21 of said *translation information* (s6 <-> r4) of said second/destination terminal 42" as recited in claim 1.

Thirdly, Watanuki merely "encapsulates" the IPv4 header 1401 into the packet 1501 (col. 19, lines 17-38), rather than "rewriting, at said additional translator 12, said **destination address** s6 of the packet to said second address r4" as the present invention.

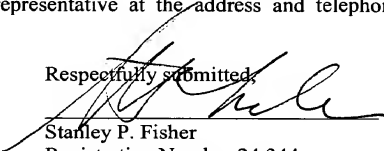
Applicants contend that none of the cited references or their combinations teaches or suggests each and every feature of the present invention as recited in independent claims 1, 6 and 9-10. As such, the present invention as now claimed is distinguishable and thereby allowable over the rejections raised in the Office Action. The withdrawal of the outstanding prior art rejections is in order, and is respectfully solicited.

Conclusion

In view of all the above, Applicants respectfully submit that certain clear and distinct differences as discussed exist between the present invention as now claimed and the prior art references upon which the rejection in the Office Action relies. These differences are more than sufficient that the present invention as now claimed would not have been anticipated nor rendered obvious given the prior art. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application as amended is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and telephone number indicated below.

Respectfully submitted,



Stanley P. Fisher
Registration Number 24,344

Juan Carlos A. Marquez
Registration No. 34,072

REED SMITH LLP
3110 Fairview Park Drive
Suite 1400
Falls Church, Virginia 22042
(703) 641-4200

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SPF/JCM/JT